



Attorney's Docket No. 3477-95

PATENT

IN THE UNITED STATES DESIGNATED OFFICE (DO/US)

In re: Aubin et al.

Confirmation No.: 6914

Serial No.: 10/089,429

International Filing Date: August 30, 2000

For: ESTROGEN RELATED RECEPTOR ERR $\alpha$ , A REGULATOR OF BONE  
FORMATION

December 8, 2003

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450


**INFORMATION DISCLOSURE STATEMENT**

Sir:

Attached is a form PTO-1449, together with a copy of each of the identified document(s). It is requested that these documents be considered by the Examiner and officially made of record in accordance with the provisions of 37 C.F.R. § 1.56 and Section 609 of the MPEP.

This Information Disclosure Statement is submitted in accordance with 37 C.F.R. § 1.97(b), within three months of the filing date of the above-referenced application or before the mailing of a first Office Action on the merits, whichever event occurs last. Therefore, no fee is believed due. However, the Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-0220.

Respectfully submitted,

  
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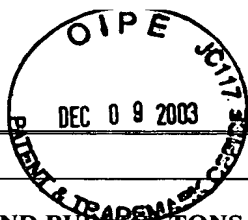
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Sloan Smith



PTO FORM 4/92

**FORM PTO - 1449**  
**LIST OF PATENTS AND PUBLICATIONS**  
**FOR APPLICANT'S INFORMATION**  
**DISCLOSURE STATEMENT**

**ATTY DOCKET 3477.95**  
**APPLICANT: Aubin et al.**  
**FILING DATE: March 29, 2002**

**SERIAL NO. 10/089,429**  
**GROUP 1614**

**UNITED STATES LETTERS PATENTS**

Exr. Init.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS
	1 5 8 4 0 6 9 0	Nov. 24, 1998	HOLICK	514	12
	2 5 7 1 0 0 0 4	Jan. 20, 1998	EVANS et al.	435	6
	3 5 5 7 1 6 9 6	Nov. 5, 1996	EVANS et al.	435	69.1

**FOREIGN PATENT DOCUMENTS**

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS

**OTHER ART (INCLUDING AUTHOR, TITLE DATE, PERTINENT PAGES, ETC.)**

4.	Aubin, JE. et al., <b>The Osteoblast Lineage</b> , (1996), Principles of Bone Biology, Academic Press, San Diego, pp. 51-67.
5.	Bonnelye, E. et al., <b>The ERR-1 Orphan Receptor is a Transcriptional Activator Expressed During Bone Development</b> , (1997), Mol Endocrinol, v.11, pp. 905-916.
6.	Bonnelye, E. et al. <b>Expression of the estrogen-related receptor 1 (ERR-1) orphan receptor during mouse development</b> , (1997) Mechanisms of Development, v. 65, pp. 71-85.
7.	Bonnelye E et al., <b>The Orphan Receptor, Estrogen Related Receptor ERR<math>\alpha</math>, is Differentially Expressed during Osteoblast Development and Regulates Bone Formation</b> , (1999), Journal of Bone and Mineral Research, v. 14, p. S193.
8.	Braidman, JP. et al., <b>Preliminary In Situ Identification of Estrogen Target Cells in Bone</b> , (1995), Journal of Bone and Mineral Research, v. 10, pp. 74-80.
9.	Buckley,MF. et al., <b>Expression and amplification of cyclin genes in human breast cancer</b> , (1993), Oncogene, v. 8, pp. 2127-2133.
10.	Enmark,E et al., <b>Orphan Nuclear Receptors-The First Eight Years</b> , (1996), Mol.Endocrinol., v.10, pp. 1293-1307.
11.	Giguère V. et al., <b>Identification of a new class of steroid hormone receptor</b> , (1988), Nature v. 331, pp.91-94.
12.	Gronemeyer H. et al., <b>Transcription factors 3: nuclear receptors; Protein profile</b> , (1995), v. 2, pp. 1173-1308.
13.	Harris,SA. et al., <b>Estrogens and Progestins</b> , (1996), Principles of Bone Biology. Academic Press, San Diego, pp. 507-520.
14.	Hong,H. et al., <b>Hormone-independent Transcriptional Activation and Coactivator Binding by Novel Orphan Nuclear Receptor ERR3</b> , (1999), J. Biol. Chem, v. 274 (32), pp. 22618-22626.
15.	Hoyland,JA. et al., <b>Effect of Ovarian Steroid Deficiency on Oestrogen Receptor <math>\alpha</math> Expression in Bone</b> , (1999), Journal of Pathology, v. 188 (3), pp. 294-303.
16.	Johnston,S.D., et al., <b>Estrogen-Related Receptor <math>\alpha</math>1 Functionally Binds as a Monomer to Extended Half-Site Sequences Including Ones Contained Within Estrogen-Response Elements</b> , (1997), Molecular Endocrinology, v. 11, pp. 342-352.
17.	Korach,K.S. <b>Insights from the Study of Animals Lacking Functional Estrogen Receptor</b> , (1994), Science, v. 266, pp. 1524-1527.
18.	Kuiper,G.G.JM. et al., <b>Cloning of a novel estrogen receptor expressed in rat prostate and ovary</b> , (1996), Proc.Natl Acad. Sci. USA, v. 93, pp. 5925-5930.

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<b>FORM PTO - 1449</b> <b>LIST OF PATENTS AND PUBLICATIONS</b> <b>FOR APPLICANT'S INFORMATION</b> <b>DISCLOSURE STATEMENT</b>		<b>ATTY DOCKET 3477.95</b> <b>APPLICANT: Aubin et al.</b> <b>FILING DATE: March 29, 2002</b>	<b>SERIAL NO. 10/089,429</b>  <b>GROUP 1614</b>

19.	Komm, BS, et al., <b>Estrogen Binding, Receptor mRNA, and Biologic Response in Osteoblast-Like Osteosarcoma Cells</b> , (1988), Science, v. 241, pp. 81-83.
20.	Malaval, L., et al., <b>Kinetics of Osteoprogenitor Proliferation and Osteoblast Differentiation In Vitro</b> , (1999), J. Cell. Biochem., v. 74, pp. 616-627.
21.	Onoe, Y, et al., <b>Expression of Estrogen Receptor <math>\beta</math> in Rat Bone</b> , (1997), Endocrinology, v. 138, No.10, pp. 4509-4512.
22.	Pacifici, R., <b>Estrogen, Cytokines, and Pathogenesis of Postmenopausal Osteoporosis</b> , (1996), Journal of Bone and Mineral Research, v. 11, No. 8, pp. 1043-1051.
23.	Sabbah, M, et al., <b>Estrogen induction of the cyclin D1 promoter: Involvement of a cAMP response-like element</b> , (1999), Proc Natl. Acad. Sci., v. 96, pp. 11217-11222.
24.	Shigeta, H., et al., <b>The mouse estrogen receptor-related orphan receptor <math>\alpha 1</math>: molecular cloning and estrogen responsiveness</b> , (1997), Journal of Molecular Endocrinology, v. 19, pp. 299-309.
25.	Sladek, R., et al., <b>The Orphan Nuclear Receptor Estrogen-Related Receptor <math>\alpha</math> Is a Transcriptional Regulator of the Human Medium-Chain Acyl Coenzyme A Dehydrogenase Gene</b> , (1997), Mol. Cell. Biol., v. 17, pp. 5400-5409.
26.	Turner RT, et al., <b>Skeletal Effects of Estrogen</b> , (1994), Endocrine Reviews, v. 15, pp. 275-300.
27.	Vanacker, J-M. et al., <b>Transcriptional targets shared by estrogen receptor-related receptors (ERRs) and estrogen receptor (ER) <math>\alpha</math>, but not by ER<math>\beta</math></b> , (1999), The EMBO Journal v. 18, pp. 4270-4279.
28.	Vanacker, J.-M. et al., <b>Activation of the Osteopontin Promoter by the Orphan Nuclear Receptor Estrogen Receptor Related <math>\alpha 1</math></b> , (1998), Cell Growth Differ., v. 9, pp. 1007-1014.
29.	Vanderschueren et al., <b>Aromatization of Androgens is Important for Skeletal Maintenance of Aged Male Rats</b> , (1996), pp. 179-183.
30.	Vega, RB., et al., <b>A Role for Estrogen-related Receptor <math>\alpha</math> in the Control of Mitochondrial Fatty Acid <math>\beta</math>-Oxidation during Brown Adipocyte Differentiation</b> , (1997), Journal of Biological Chemistry, v. 272, pp. 31693-31699.
31.	Wiley SR, et al., <b>SV40 early-to-late switch involves titration of cellular transcriptional repressors</b> , (1993), Genes and Development, v. 7, pp. 2206-2219.
32.	Windahl, SH, et al., <b>Increased cortical bone mineral content but unchanged trabecular bone mineral density in female ER<math>\beta</math><sup>-/-</sup> mice</b> , (1999), Journal of Clinical Investigation, v. 104, pp. 895-901.
33.	Windahl, SH, et al., <b>Cellular Distribution of Estrogen Receptor <math>\beta</math> in Neonatal Rat Bone</b> , (2000), Bone, v. 26, pp. 117-121.
34.	Yang N. et al., <b>Estrogen-related Receptor, hERR1, Modulates Estrogen Receptor-mediated Response of Human Lactoferrin Gene Promoter</b> , (1996), J. Biol. Chem. v. 271, pp. 5795-5804.
35.	Zhang, Z., et al., <b>Estrogen Receptor-related Receptor <math>\alpha 1</math> Interacts with Coactivator and Constitutively Activates the Estrogen Response Elements of the Human Lactoferrin Gene</b> , (2000), J. Biol. Chem., v. 275, pp. 20837-20846.

EXAMINER

DATE CONSIDERED

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and no considered. Include copy of this form with next communication to applicant.